



seq listing 81408-4300.txt  
SEQUENCE LISTING

<110> Golembo, Myriam  
Yayon, Avner

<120> METHOD AND COMPOSITION FOR TREATMENT OF SKELETAL DYSPLASIAS

<130> 81408-4300

<140> US 10/664,605  
<141> 2003-09-15

<150> US 60/276,939  
<151> 2001-03-20

<150> IL 142118  
<151> 2001-03-20

<150> PCT/IL02/00229  
<151> 2002-03-20

<160> 75

<170> PatentIn version 3.1

<210> 1  
<211> 22  
<212> PRT  
<213> Homo sapiens

<300>  
<308> P23582  
<309> 2001-10-16  
<313> (105)..(126)

<400> 1

Gly Leu Ser Lys Gly Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser  
1 5 10 15

Met Ser Gly Leu Gly Cys  
20

<210> 2  
<211> 17  
<212> PRT  
<213> Homo sapiens

<300>  
<308> P23582  
<309> 2001-10-16  
<313> (110)..(126)

<400> 2

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

seq listing 81408-4300.txt

<210> 3  
<211> 29  
<212> PRT  
<213> Homo sapiens

<300>  
<308> P01161  
<309> 2001-10-16  
<313> (123)..(150)

<400> 3

Pro Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Met Asp Arg Ile  
1 5 10 15

Gly Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr  
20 25

<210> 4  
<211> 32  
<212> PRT  
<213> Homo sapiens

<300>  
<308> P16860  
<309> 2001-10-16  
<313> (103)..(134)

<400> 4

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp  
1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His  
20 25 30

<210> 5  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<220>  
<221> MISC\_FEATURE  
<222> (4)..(4)  
<223> X at position 4 is defined as Xaa in the specification and is either Leu (L), Ile (I) or Val (V)

<220>  
<221> MISC\_FEATURE  
<222> (5)..(5)  
<223> X at position 5 is defined as Xbb in the description and is either Lys (K), Leu (L) or Met (M)

seq listing 81408-4300.txt

<220>  
<221> MISC\_FEATURE  
<222> (6)..(6)  
<223> X at position 6 is defined as Xcc in the description and is either Leu (L), Ile (I), Ala (A) or Val (V)

<220>  
<221> MISC\_FEATURE  
<222> (11)..(11)  
<223> X at position 11 is defined as Xdd in the description and is either Ser (S), Ala (A), Gly (G), Thr (T) or Asn (N)

<220>  
<221> MISC\_FEATURE  
<222> (12)..(12)  
<223> X at position 12 is defined as Xee in the description and is either Met (M), Ala (A), Lys (K), Trp (W).

<220>  
<221> MISC\_FEATURE  
<222> (14)..(14)  
<223> X at position 14 is defined as Xff in the description and is either Gly (G), Lys (K), Ala (A) or Leu (L).

<220>  
<221> MISC\_FEATURE  
<222> (15)..(15)  
<223> X at position 15 is defined as Xgg in the specification and is either Leu (L) or Met (M).

<400> 5

Cys Phe Gly Xaa Xaa Xaa Asp Arg Ile Gly Xaa Xaa Ser Xaa Xaa Gly  
1 5 10 15

Cys

<210> 6  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 6

Cys Ala Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

seq listing 81408-4300.txt

<210> 7  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 7

Cys Phe Gly Leu Lys Leu Ala Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 8  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 8

Cys Phe Gly Leu Lys Leu Asp Ala Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 9  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 9

Cys Phe Gly Leu Lys Leu Asp Arg Ala Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 10  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

seq listing 81408-4300.txt

<400> 10

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Ala Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 11

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide variant

<400> 11

Cys His Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Cys  
1 5 10 15

<210> 12

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide variant

<400> 12

Cys His Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ala Cys  
1 5 10 15

<210> 13

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide variant

<400> 13

Cys His Phe Gly Leu Lys Leu Asp Arg Ile Gly Ala Gln Ser Cys  
1 5 10 15

<210> 14

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide variant

<400> 14

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Cys  
Page 5

seq listing 81408-4300.txt

1 5 10

<210> 15  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 15

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ala Gln Ser Cys  
1 5 10

<210> 16  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 16

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Cys  
1 5 10

<210> 17  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 17

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ala Met Cys  
1 5 10

<210> 18  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 18

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Gln Cys  
1 5 10

<210> 19  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

seq listing 81408-4300.txt

<400> 19

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ala Gln Cys  
1 5 10

<210> 20

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide variant

<400> 20

Cys His Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Cys  
1 5 10

<210> 21

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide variant

<400> 21

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Cys  
1 5 10

<210> 22

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide variant

<400> 22

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Cys  
1 5 10

<210> 23

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> peptide variant

<400> 23

Cys His Phe Gly Leu Lys Leu Asp Arg Ile Cys  
1 5 10

seq listing 81408-4300.txt

<210> 24  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 24

Cys Ala Gly Leu Lys Leu Ala Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 25  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 25

Cys Ala Gly Leu Lys Leu Asp Arg Ile Gly Ser Ala Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 26  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 26

Cys Phe Gly Leu Lys Leu Ala Arg Ile Gly Ser Ala Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 27  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 27

seq listing 81408-4300.txt

Cys Ala Gly Leu Lys Leu Ala Arg Ile Gly Ser Ala Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 28  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 28

Cys Ile Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 29  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 29

Cys Leu Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 30  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 30

Cys Met Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

seq listing 81408-4300.txt

<210> 31  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 31

Cys Trp Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 32  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 32

Cys Val Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 33  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 33

Cys His Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 34  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 34

seq listing 81408-4300.txt

Cys Thr Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 35  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 35

Cys Phe Gly Leu Lys Leu Glu Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 36  
<211> 17  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> peptide variant  
<400> 36

Cys Phe Gly Leu Lys Leu Gln Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 37  
<211> 17  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> peptide variant  
<400> 37

Cys Phe Gly Leu Lys Leu Asn Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

seq listing 81408-4300.txt

<210> 38  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 38

Cys Phe Gly Leu Lys Leu Ile Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 39  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 39

Cys Phe Gly Leu Lys Leu Met Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 40  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 40

Cys Phe Gly Ala Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 41  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 41

seq listing 81408-4300.txt

Cys Phe Gly Ile Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 42  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 42

Cys Phe Gly Val Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 43  
<211> 17  
<212> PRT  
<213> Artificial sequence  
  
<220>  
<223> peptide variant  
<400> 43

Cys Phe Gly Leu Leu Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 44  
<211> 17  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> peptide variant  
<400> 44

Cys Phe Gly Leu Met Leu Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

seq listing 81408-4300.txt

<210> 45  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 45

Cys Phe Gly Leu Lys Ala Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 46  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 46

Cys Phe Gly Leu Lys Ile Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 47  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 47

Cys Phe Gly Leu Lys Val Asp Arg Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 48  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 48

seq listing 81408-4300.txt

Cys Phe Gly Leu Lys Leu Asp His Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 49  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
  
<400> 49

Cys Phe Gly Leu Lys Leu Asp Lys Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 50  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
  
<400> 50

Cys Phe Gly Leu Lys Leu Asp Gln Ile Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 51  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
  
<400> 51

Cys Phe Gly Leu Lys Leu Asp Arg Leu Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

seq listing 81408-4300.txt

<210> 52  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 52

Cys Phe Gly Leu Lys Leu Asp Arg Val Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 53  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 53

Cys Phe Gly Leu Lys Leu Asp Arg Thr Gly Ser Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 54  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 54

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ala Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 55  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 55

seq listing 81408-4300.txt

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Gly Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 56  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 56

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Thr Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 57  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 57

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Asn Met Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 58  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 58

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Ala Leu Gly  
1 5 10 15

Cys

seq listing 81408-4300.txt

<210> 59  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 59

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Leu Leu Gly  
1 5 10 15

Cys

<210> 60  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 60

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Lys Leu Gly  
1 5 10 15

Cys

<210> 61  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 61

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Gln Gly  
1 5 10 15

Cys

<210> 62  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 62

seq listing 81408-4300.txt

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Met Gly  
1 5 10 15

Cys

<210> 63  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant  
<400> 63

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Ala Gly  
1 5 10 15

Cys

<210> 64  
<211> 17  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> peptide variant  
<400> 64

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Met Ser Gly Gly Gly  
1 5 10 15

Cys

<210> 65  
<211> 17  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> peptide variant  
<400> 65

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Trp Ser Gly Leu Gly  
1 5 10 15

Cys

seq listing 81408-4300.txt

<210> 66  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 66

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser His Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 67  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 67

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Lys Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 68  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 68

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Ser Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 69  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> peptide variant

<400> 69

seq listing 81408-4300.txt

Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser Gly Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 70  
<211> 17  
<212> PRT  
<213> Artificial sequence

<220>  
<223> peptide variant  
<400> 70

Cys His Gly Leu Lys Leu Asp Arg Ile Gly Ser Ala Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 71  
<211> 17  
<212> PRT  
<213> Artificial sequence

<220>  
<223> peptide variant  
<400> 71

Cys Thr Gly Leu Lys Leu Asp Arg Ile Gly Ser Ala Ser Gly Leu Gly  
1 5 10 15

Cys

<210> 72  
<211> 23  
<212> DNA  
<213> Mouse growth hormone

<400> 72  
tggcaatggc tacagactct cgg

23

<210> 73  
<211> 23  
<212> DNA  
<213> Mouse growth hormone

<400> 73  
gaaggcacag ctgtttcca caa

23

<210> 74

seq listing 81408-4300.txt

<211> 26  
<212> DNA  
<213> Mouse CNP

<400> 74  
acccaagctt atgcacctct cccagc

26

<210> 75  
<211> 24  
<212> DNA  
<213> Mouse CNP

<400> 75  
ccatcgatct aacatcccag accg

24